

WHAT IS CLAIMED:

1. An electromagnetic device used in a case containing oil, said electromagnetic device comprising:

an electromagnetic device body including a coil formed with a conductor wound around a bobbin and a cover member enclosing said coil; and

a cover for covering said electromagnetic device body,

wherein said cover member protects said coil from being directly subjected to molding pressure when said cover is formed by injection molding, by covering said coil.

2. An electromagnetic device used in a case containing oil, said electromagnetic device comprising:

a bobbin; and

a conductor wound around said bobbin and coated with an outer coating,

wherein said bobbin is composed of a material having lubricating characteristics with respect to the material of said outer coating.

3. An electromagnetic device according to Claim 2, wherein said bobbin is made of a polytetrafluoroethylene.

4. An electromagnetic device used in a case containing oil, said electromagnetic device comprising:

a bobbin;

a conductor wound around said bobbin and coated with an outer coating;

and

a material having lubricating characteristics deposited on a surface of said bobbin.

5. An electromagnetic device according to Claim 4, wherein said material having lubricating characteristics is silicon.

6. An electromagnetic device according to Claim 4, wherein said material having lubricating characteristics is an oil.

7. An electromagnetic device used in a case containing oil, said electromagnetic device comprising:

a bobbin; and

a conductor wound around said bobbin and coated with an outer coating,

wherein the thickness of said outer coating of said conductor exceeds the size of a flash produced on said bobbin.

8. An electromagnetic device according to Claim 1, wherein the thickness of said outer coating of said conductor exceeds the size of a flash produced on said bobbin.